

**REMARKS**

Continued examination and favorable reconsideration of the above-identified application are respectfully requested. Claims 1-11, 13-23, and 34 remain pending in the application. Claims 24-33 were previously canceled. By this Amendment, claim 1 has been amended, claim 12 has been canceled without prejudice or disclaimer, and new claim 34 has been added. Support for new claim 34 can be found at least in paragraph [040] of the original specification.

**Interview Summary**

Applicant and Applicant's representative appreciate the courtesies extended to Applicant's representative during the interview held on July 10, 2008. During the interview, Applicant's representative presented the amended claims set forth herein. Applicant's representative pointed out that the phrase "excess diluent" is described in the present application, for example, in paragraphs [0041] and [0048]-[0050]. Applicant's representative further explained that excess diluent is useful to fully saturate or over-saturate the purification material. Once this is done, the excess diluent can be moved from the purification column and into the output well before a fluid sample is introduced into the purification column. By removing excess diluent first, one can increase the contact area between the fluid sample and the purification material. The sample, once purified, can then mix with the excess diluent in the output well so that a mixture of increased volume can be provided. Applicant's representative further pointed out that Hunt et al. does not teach or suggest over-saturating a purification material or moving excess diluent from a purification column into an output well before introducing a fluid sample into the purification column. The

Examiner indicated that the claims as amended would likely overcome the rejections based on Hunt et al.

**Rejection of Claims 1-23 Under 35 U.S.C. §112, first paragraph**

At page 2 of the Office Action, claims 1-23 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. The Examiner states that the scope of the term “excess diluent” is unclear. For the reasons set-forth below, this rejection is respectfully traversed.

The specification clearly describes what is meant by “excess diluent.” In paragraphs [041] and [048]-[050], for example, the present application discloses that the “purification material can be over-saturated with diluent so as to provide an excess diluent in the purification column” (see, paragraph [041]). One of ordinary skill in the art would understand that the amount of diluent required to saturate a purification material would depend on the amount of purification material. Regardless of the amount of purification material, however, any amount in excess of that required to saturate the purification material would be considered excess diluent.

In order to further assist the Examiner, however, claim 1 has been amended to even more clearly define “excess diluent” as being diluent in excess of the amount required to saturate the purification material. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**Rejection of Claims 1-23 Under 35 U.S.C. §112, second paragraph**

At page 3 of the Office Action, claims 1-23 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being incomplete for omitting essential steps, such omission allegedly amounting to a gap between the steps. The Office Action states that the scope of the phrase “excess diluent” is unclear. For the reasons set-forth below, this rejection is respectfully traversed.

In order to assist the Examiner, the claims have been amended to even more clearly define what is meant by “excess diluent.” The claims have been amended also to recite that the purification “column,” rather than the purification “material,” is rendered free of excess diluent. As recited in the claims, the purification material is “saturated with diluent.” As described previously, any amount of diluent in the purification column that is not used to saturate the purification material would be excess diluent. Thus, as provided in the present application, excess diluent is provided in the purification column when the purification material is “over saturated” with diluent (see, paragraph [041]). One of ordinary skill in the art would clearly understand that the amount of diluent required to saturate a purification material would depend on the amount of purification material. Regardless of the amount of purification material, however, one of ordinary skill in the art would understand that any amount in excess of the amount of diluent required to saturate the purification material would be considered excess diluent. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**Rejection of Claims Under 35 U.S.C. §102**

At page 4 of the Office Action, claims 1-17 and 23 are rejected under 35 U.S.C. §102(e) as being anticipated by Hunt et al. (U.S. Patent Application Publication No. 2002/0110495). For the reasons set-forth below, this rejection is respectfully traversed.

Hunt et al. fails to disclose or suggest all of the features of the claimed invention. The Office Action fails to address the features of claim 1 added by Applicant in the Amendment filed October 18, 2007, namely: (1) moving excess diluent out of the purification column to provide the purification material free of excess diluent; and (2) after moving excess diluent into the output reservoir, moving a fluid sample through the purification column. These features are neither disclosed nor suggested by Hunt et al. The Examiner states at page 5 of the Office Action, that Hunt et al. “anticipates that the fluid sample to be processed is placed in the sample chamber 22 with a diluent or binding buffer...” Emphasis added. Such a description in Hunt et al., however, does not anticipate the features of the present claims. In order to further prosecution at this time, however, the claims have been amended to even more clearly describe that the steps of the claimed method are performed in a specific sequence, which even further distinguishes the claimed invention from Hunt et al.

Unlike the present claims, as currently amended, Hunt et al. fails to disclose or suggest introducing a fluid sample into a purification column through an entry port after moving excess diluent out of the purification column. Hunt et al. only describes moving diluent or buffer out of a purification column with a fluid sample, not before the fluid sample is introduced or moved through the purification column.

Accordingly, reconsideration and withdrawal of the rejection to claim 1, and the claims dependent thereon, are respectfully requested.

**Rejection of Claims Under 35 U.S.C. §103(a)**

At page 8 of the Office Action, claims 1-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hunt et al. For the reasons set forth below, this rejection is respectfully traversed.

As described above, Hunt et al. fails to provide any direction, suggestion, or motivation for arriving at the claimed methods. In fact, if Hunt et al. “anticipates that the fluid sample to be processed is placed in the sample chamber 22 with a diluent or binding buffer,” as suggested by the Examiner, such a concept does not anticipate the present claims, and instead teaches away from the present claims. Hunt et al. teaches nothing about moving excess diluent to provide a purification column free of excess diluent before introducing a sample into the purification column. It would not be predictable to first remove excess diluent in the method of Hunt et al. because to do so would add a step and complicate the method of Hunt et al. for no apparent reason. As such, one of ordinary skill in the art would not arrive at the claimed methods, given the teachings of Hunt et al.

Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**New Claim 34**

New claim 34 depends from claim 1, and further defines the purification column recited in claim 1. Claim 34 states that the purification column accommodates a volume of from about one nanoliter to about 75 microliters. Hunt et al. fails to teach or suggest a purification column that

U.S. Patent Application No. 10/628,281  
Amendment dated July 11, 2008  
In Response to the Office Action Mailed April 21, 2008

accommodates a volume as recited in claim 34. At least for these reasons, Applicant respectfully submits that claim 34 is also in condition for allowance.

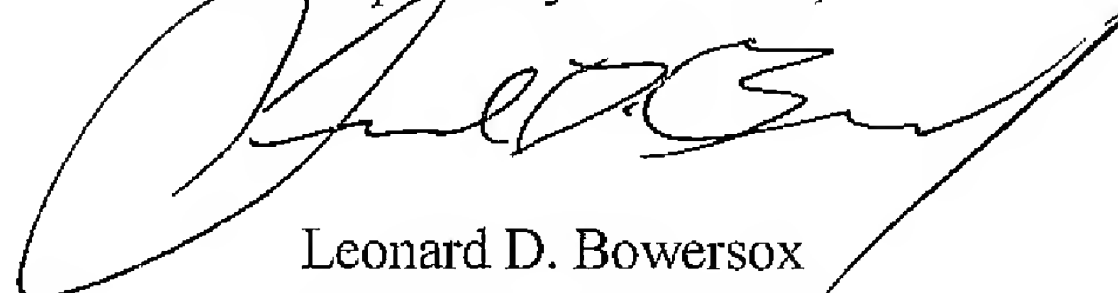
### CONCLUSION

For at least the reasons discussed in detail above, Applicant submits that all pending claims are patentable over the applied reference. Withdrawal of all rejections and timely issuance of a Notice of Allowance are respectfully requested.

Should the Examiner deem that any further action by Applicant or Applicant's undersigned representative is desirable and/or necessary, the Examiner is invited to telephone the undersigned at the number set forth below.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



Leonard D. Bowersox  
Registration No. 33,226

KILYK & BOWERSOX, P.L.L.C.  
3925 Chain Bridge Road, Suite D-401  
Fairfax, VA 22030  
Tel.: (703) 385-9688  
Fac.: (703) 385-9719